UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

MJ

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,718	07/09/2003	Herman Waldmann	695458-79	9454

7590 04/19/2007

CARELLA, BYRNE, BAIN, GILFILLAN, CECCHI,
STEWART & OLSTEIN
6 Becker Farm Road
Roseland, NJ 07068

EXAMINER	
BLANCHARD, DAVID J	
ART UNIT	**PAPER NUMBER**
1643	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/615,718	WALDMANN ET AL.	
	Examiner	Art Unit	
	David J. Blanchard	1643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 February 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,6-10 and 12-17* is/are pending in the application.

4a) Of the above claim(s) *16* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,6-10, 12-15 and 17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 2-5 and 11 have been cancelled.

Claims 1. 6, 9-10 and 12-13 have been amended.

Claim 17 has been added.

2. Claim 16 remains withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim.

3. Claims 1, 6-10, 12-15 and 17 are under consideration.

4. This Office Action contains New Grounds of Rejections.

Rejections Withdrawn

5. The rejection of claims 1-15 under 35 U.S.C. 112, second paragraph, as being indefinite in the recitation "reduced side effects" in claim 1 is withdrawn in view of the amendments to the claims and the cancellation of claims 2-5 and 11.

6. The rejection of claims 1-15 under 35 U.S.C. 112, second paragraph, as being indefinite in reciting that the therapeutic protein/antibody is modified with a compound that inhibits the binding of the protein to the therapeutic target and also produces a therapeutic effect by binding to the therapeutic target is withdrawn in view of the amendments to the claims and applicant's arguments.

7. The rejection of claims 2-5 and 11 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement is withdrawn in view of the cancellation of the claims.

8. The rejection of claims 2-5 and 11 under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a pharmaceutical composition comprising CAMPATH-1H (humanized anti-CD52 antibody), modified by linkage to a CD52 mimotope selected from QTSSPSAD and QTSAAAVD, does not reasonably provide enablement for all other therapeutic proteins and therapeutic antibodies modified (i.e., bound or linked) with just any other peptide or molecule (i.e., compound), wherein the therapeutic protein or therapeutic antibody has reduced side effects and produces a

therapeutic effect by binding to the therapeutic target is withdrawn in view of the cancellation of the claims.

9. The rejection of claims 2-3 and 5 under 35 U.S.C. 102(b) as being anticipated by Hale G (Immunotechnology, 1:175-187, 1995) is withdrawn in view of the cancellation of the claims.

10. The rejection of claims 1-2 under 35 U.S.C. 102(b) as being anticipated by Waldmann et al (WO 97/31024, published 8/28/1997) is withdrawn in view of the amendments to claim 1, applicants' arguments and the cancellation of claim 2.

11. The provisional rejection of claims 1-15 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 6-10, 13-16 and 35 of copending Application No. 09/979,948 is withdrawn in view of the cancellation of claims 1, 6-10, 13-16 and 35 of copending Application No. 09/979,948.

Objections/Rejections Maintained and New Grounds of Rejections

12. The objection to the disclosure as containing sequences that are encompassed by the sequences rules (37 C.F.R. §§ 1.821-1.825) and require sequence identifiers is maintained.

The response filed 2/1/2007 does not address this requirement to comply with the sequence rules and as such the objection is maintained for reasons already of record (e.g., see item nos. 6-8 of the previous Office Action mailed 8/4/2006).

Claim Rejections - 35 USC § 112

13. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

14. The rejection of claims 1, 6-10, 12-15 and now applied to newly added claim 17 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description

requirement is maintained. The claims contain subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

The response filed 2/1/2007 states that a multitude of antibodies and peptides are known to those skilled in the art, and one skilled in the art can modify the antibody with a peptide by techniques that are known to those skilled in the art. According to applicant, once one skilled in the art modified the antibody with a peptide, one skilled in the art also would be able to determine, by techniques known to those skilled in the art, whether binding of the modified antibody to the therapeutic target had been reduced vis-à-vis the unmodified antibody. Applicant has shown, as acknowledged by the examiner, that one may modify the CAMPATH-1H antibody with the CD52 mimotope QTSSPSAD or QTSAAAVD and one skilled in the art would understand that other antibodies may be modified with peptides in a similar manner. Applicants' arguments have been fully considered but are not found persuasive. In the instant case, the claims are drawn to a pharmaceutical comprising a therapeutic antibody being modified with a peptide that reduces binding of the antibody to the therapeutic target and is effective for reducing an immune response against the antibody and for producing a therapeutic effect by binding to the therapeutic target. Thus, the claims encompass an extremely large genus of therapeutic antibodies linked to a genus of peptides, disclosed for treating, preventing and/or reducing any disease condition or disorder. However, written description of the present application only reasonably conveys a therapeutic humanized anti-CD52 antibody, CAMPATH-1H, modified by linking two different peptides, CD52 mimotope (QTSSPSAD) or CD52 mimotope mutant 9 (QTSAAAVD) in which the antibody-mimotope conjugate reduced the immune response (i.e., cytokine release) and had a therapeutic effect by binding CD52. Applicants' reliance on the description of a single species of humanized anti-CD52 antibody, CAMPATH-1H, modified by linking a CD52 mimotope (QTSSPSAD or QTSAAAVD) and having the properties and characteristics unique to the CAMPATH-1H-CD52 mimotope (QTSSPSAD or QTSAAAVD) interaction is not representative of the entire genus because the genus is highly variable, inclusive

to a variety of therapeutic antibodies, having different therapeutic targets, functions and effects (i.e., agonistic, antagonistic, blocking, recruitment of effector cells, ect) and which are linked to any peptide, inclusive to peptides of varying lengths and chemical composition. Thus, when there is substantial variation within the genus, one must describe a sufficient variety of species to reflect the variation within the genus. The disclosure of only one species encompassed within a genus adequately describes a claim directed to that genus only if the disclosure "indicates that the patentee has invented species sufficient to constitute the gen[us]." See Enzo Biochem, 323 F.3d at 966, 63 USPQ2d at 1615; Noelle v. Lederman, 355 F.3d 1343, 1350, 69 USPQ2d 1508, 1514 (Fed. Cir. 2004) (Fed. Cir. 2004)("[A] patentee of a biotechnological invention cannot necessarily claim a genus after only describing a limited number of species because there may be unpredictability in the results obtained from species other than those specifically enumerated."). The specification provides no other structural description of a therapeutic antibody being modified with a peptide that reduces binding of the therapeutic antibody to a therapeutic target, wherein the therapeutic antibody-peptide pair is effective for reducing an immune response against the antibody and produces a therapeutic effect by binding to the therapeutic target, other than the ones specifically exemplified; in essence the specification simply directs those skilled in the art to go figure out for themselves what the claimed genus of therapeutic antibody-peptide pairs look like. A description of what a material does, rather than what it is, usually does not suffice. *Eli Lilly*, 119 F.3d at 1568, 43 USPQ2d at 1406. Further, Applicants' argument that therapeutic antibodies and peptides are known to those skilled in the art and one skilled in the art also would be able to determine, by techniques known to those skilled in the art, whether binding of the modified antibody to the therapeutic target had been reduced vis-à-vis the unmodified antibody seems to go more toward enablement than description. That is, the argument seems intended to show that, following the teachings in the specification, those skilled in the art could have produced other therapeutic antibody-peptide pairs, and determined which (if any) would have the claimed properties, without undue experimentation. The instant rejection is based on lack of adequate written description, not lack of enablement. The written

description requirement is separate and distinct from the enablement requirement. *In re Barker*, 559 F.2d 588, 194 USPQ 470 (CCPA 1977), cert. denied, 434 U.S. 1064 (1978); *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1562, 19 USPQ2d 1111, 1115 (Fed. Cir. 1991).

Clearly, one of skill in the art would not recognize that the applicant was in possession of the necessary common attributes or features of the elements possessed by the members of the genus in view of the single disclosed CAMPATH-1H-mimotope species. Therefore, only the humanized anti-CD52 antibody, CAMPATH-1H, linked to the CD52 mimotope QTSSPSAD or QTSAAAVD, but not the full breadth of the claims, meets the written description provision of 35 U.S.C. §112, first paragraph and the rejection is maintained.

15. The rejection of claims 1, 6-10, 12-15 and now applied to newly added claim 17 under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a pharmaceutical composition comprising CAMPATH-1H (humanized anti-CD52 antibody), modified by linkage to a CD52 mimotope selected from QTSSPSAD and QTSAAAVD, does not reasonably provide enablement for all other therapeutic proteins and therapeutic antibodies modified (i.e., bound or linked) with just any other peptide or molecule (i.e., compound), wherein the therapeutic protein or therapeutic antibody has reduced side effects and produces a therapeutic effect by binding to the therapeutic target is maintained.

The response filed 2/1/2007 states that as noted above (description requirement) that applicants' have modified the CAMPATH-1H antibody with two different mimotope peptides and once applicants' had proven the principle with the CAMPATH-1H antibody, one skilled in the art would know readily how to modify other antibodies with other peptides to reduce the binding of such antibodies to a therapeutic target. Applicant states that because applicants' have proven the principle with respect to the CAMPATH-1H antibody bound to two different mimotopes, one skilled in the art would reasonably expect that other antibodies can be modified with other peptides to reduce

binding of such antibodies to their respective therapeutic targets. Applicant asserts that the examiner has provided nothing other than sheer speculation in an attempt to show otherwise and the art cited by the examiner showing that protein chemistry is unpredictable is nothing more than a "red herring" and have no relevance to whether the claims are enabled. Applicants' arguments have been fully considered but are not found persuasive. While applicant has proven the principle that the CAMPATH-1H antibody modified with the CD52 mimotope QTSSPSAD or QTSAAAVD, reduces binding of CAMPATH-1H to CD52, reduces an immune response against the antibody and produces a therapeutic effect by binding to the therapeutic target CD52, applicant has not proven that the same principle is extendable to the broad scope of the claimed genus of therapeutic antibodies and peptide pairs, wherein the just any peptide reduces binding of a therapeutic antibody to a therapeutic target, reduces an immune response against the therapeutic antibody and produces a therapeutic effect by binding to the therapeutic target. Applicants' argument that the skilled artisan could modify other antibodies with other peptides to reduce the binding of such antibodies to a therapeutic target is not persuasive because the issue is make and use, not make and test to see if the skilled artisan could use. The specification does not enable the genus because where the results are unpredictable, the disclosure of a single species usually does not provide an adequate basis to support generic claims. *In re Soll*, 97 F.2d 623, 624, 38 USPQ 189, 191 (CCPA 1938). In cases involving unpredictable factors, such as most chemical reactions and physiological activity, more may be required. *In re Fisher*, 427 F.2d 833, 839, 166 USPQ 18, 24 (CCPA 1970) (contrasting mechanical and electrical elements with chemical reactions and physiological activity). See also *In re Wright*, 999 F.2d 1557, 1562, 27 USPQ2d 1510, 1513 (Fed. Cir. 1993); *In re Vaeck*, 947 F.2d 488, 496, 20 USPQ2d 1438, 1445 (Fed. Cir. 1991). This is because it is not obvious from the disclosure of one particular species, what other species will work. See MPEP 2164.03. The "principle" upon which applicant relies is limited to a humanized anti-CD52 antibody (CAMPATH-1H) linked to a CD52 mimotope (i.e., QTSSPSAD or QTSAAAVD), which reduces binding to CD52, but is competitively displaced by CD52 *in vivo* due to more favorable association and dissociation binding kinetics and the

CAMPATH-1H-mimotope conjugate reduces cytokine release. However, the art points out that even minor changes in an epitope sequence may dramatically effect the antigen-binding function of an antibody. Lederman et al (Molecular Immunology 28:1171-1181, 1991, cited on PTO-892 mailed 8/4/06) disclose that a single amino acid substitution in a common allele ablates binding of a monoclonal antibody (see entire document). Li et al (Proc. Natl. Acad. Sci. USA 77:3211-3214, 1980, cited on PTO-892 mailed 8/4/06) disclose the dissociation of immunoreactivity from other activities when constructing analogs (see entire document). Therefore, even one amino acid difference in the peptide used for the modification of the therapeutic antibody could dramatically change the affinity or binding to the antibody combining site. Thus, applicants' 'proof of concept', which is specific to the unique binding properties of the CAMPATH-1H antibody and CD52 function, could not be predictably extrapolated by those skilled in the art to the genus of peptides for modifying the genus of therapeutic antibodies or even for a particular therapeutic antibody. Applicant has not provided any guidance or direction as to how the properties of the CAMPATH-1H-CD52 mimotope interaction are predictive of the interaction between a particular therapeutic antibody and a given peptide sequence, such that the peptide modifies the therapeutic antibody to reduce binding to the therapeutic target, reduces an immune response against the therapeutic antibody and produces a therapeutic effect by binding to the therapeutic target. There is insufficient evidence or nexus between the properties of the CAMPATH-1H-CD52 mimotope interaction and making and using any other therapeutic antibody bound to just any peptide that inhibits binding of the therapeutic antibody to the therapeutic target, reduces an immune response against the therapeutic antibody, and wherein the antibody produces a therapeutic effect by binding to the therapeutic target.
The scope of the claims must bear a reasonable correlation with the scope of enablement. See *In re Fisher*, 166 USPQ 18, 24 (CCPA 1970). Thus, rather than rely on sheer speculation or create some fallacy by presenting an irrelevant topic in order to divert applicants' attention from the present enablement issue, the examiner has provided documentary evidence directly related the enablement issue in the present application given the broad scope of the claims at issue, directed to any therapeutic

antibody modified with just any peptide and having the claimed features. As stated in the MPEP: once the examiner has advanced a reasonable basis for questioning he adequacy of the disclosure, it becomes incumbent on the applicant to rebut that challenge and factually demonstrate that his/her application disclosure is in fact sufficient (MPEP 2164.05). It should be noted also that it is not opinion evidence directed to the ultimate legal question of enablement, but rather factual evidence directed to the amount of time and effort and level of knowledge required for the practice of the invention from the disclosure alone which can be expected to rebut a prima facie case of nonenablement. *See Hirschfield*, 462 F. Supp. at 143, 200 USPQ at 281. Therefore, the burden is upon the Applicants' to show objective evidence for other members of the genus of a therapeutic antibody modified by a peptide that reduces binding to a therapeutic target, reduces an immune response against the antibody and produces a therapeutic effect by binding to the therapeutic target.

In view of the broad scope of the claims at issue, the lack of the predictability of the art to which the invention pertains as evidenced by Lederman et al and Li et al, the lack of guidance and direction provided by applicant, and the absence of working examples, undue experimentation would be required to practice the claimed pharmaceutical comprising a therapeutic antibody bound or linked to a peptide that inhibits binding of the therapeutic antibody to the therapeutic target, reduces an immune response against the therapeutic antibody, and produces a therapeutic effect by binding to the therapeutic target with a reasonable expectation of success, absent a specific and detailed description in applicant's specification of how to effectively practice the claimed pharmaceutical and absent working examples providing evidence which is reasonably predictive that the claimed pharmaceutical comprising a therapeutic antibody bound or linked to a peptide inhibits binding of the therapeutic antibody to the therapeutic target, reduces an immune response against the therapeutic antibody, and produces a therapeutic effect by binding to the therapeutic target, commensurate in scope with the claimed invention.

For these reasons and those already of record the rejection is maintained.

Claim Rejections - 35 USC § 102

16. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

17. The rejection of claims 1, 6, 9-10 and now applied to newly added claim 17 under 35 U.S.C. 102(b) as being anticipated by Hale G (Immunotechnology, 1:175-187, 1995) is maintained.

The response filed 2/1/2007 states the present invention is directed to a pharmaceutical comprising a therapeutic antibody that binds to a therapeutic target, wherein the therapeutic antibody is modified with a peptide that inhibits binding of the antibody to the therapeutic target and is effective for reducing an immune response against the antibody and for producing a therapeutic effect by binding to the therapeutic target. Although Hale discloses the binding of CAMPATH antibodies to mimotopes of the CD52 antigen, the purposes of the binding studies disclosed in Hale were to characterize the CD52 epitope bound by CAMPATH more precisely, and to construct analogues of such epitope that would be useful in assays and for purifying CAMPATH antibodies, as well as studies for the antigen-binding site. Further, Applicant states that Hale is directed solely to studying the binding of CAMPATH antibodies to CD52 mimotopes in order to aid in the development of assays, of methods of purifying CAMPATH antibodies, and in studying the antibody-antigen interaction between CAMPATH antibodies and the CD52 antigen or mimotopes thereof. Applicants' arguments have been fully considered but are not found persuasive. The fact that Hale was concerned with a different purpose or doesn't recognize that the CAMPATH-1H humanized antibody bound to the synthetic peptide, QTSSPSAD, is effective for reducing an immune response against the antibody and for producing a therapeutic effect by binding to the therapeutic target, does not distinguish the claimed pharmaceutical comprising a therapeutic antibody bound to a peptide that inhibits

binding of the antibody to a therapeutic target, from the anti-CD52 humanized antibody, CAMPATH-1H, reversibly bound by the synthetic peptide, QTSSPSAD, a CD52 mimotope that inhibits binding of CAMPATH-1H to human lymphocytes expressing CD52 (i.e., "therapeutic target") by about four fold and the antibody is disclosed in various buffers including buffered saline (PBS) (i.e., reasonably interpreted to be a "pharmaceutically acceptable carrier") as taught by Hale. Artisans of ordinary skill may not recognize the inherent characteristics or functioning of the prior art... However, the discovery of a previously unappreciated property of a prior art composition, or of a scientific explanation for the prior art's functioning, does not render the old composition patentably new to the discoverer. *Atlas Powder Co. V. IRECO*, Inc 51 USPQ2d 1943 (Fed. Cir. 1999).

For these reasons and those already of record, the rejection is maintained.

Double Patenting

18. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

19. Claims 1, 6-10, 12-15 and 17 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 36-41 of copending Application No. 09/979,948.

Claims 36-41 of copending Application No. 09/979,948 are drawn to a pharmaceutical composition comprising an antibody including a light chain comprising amino acid residues 33 through 263 of SEQ ID NO:1, disclosed as the CD52 mimotope QTSSPSAD tethered to the CAMPATH-1H light chain variable region by a flexible $(Gly_4Ser)_2$ linker (e.g., see Fig. 7 and SEQ ID NO:1), wherein the antibody is an aglycosylated antibody, and wherein the binding of the Fc receptor is essentially eliminated. Further, the claims are drawn to a protein including amino acid residues 33 through 263, or 1 through 263 of SEQ ID NO:1. Thus, newly added claims 36-41 are drawn to a species that reads upon the claims in the instant application. Products of identical chemical composition cannot have mutually exclusive properties. A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. In re Spada 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). See MPEP 2112.01.

The response filed 2/1/2007 states that Application Serial No. 09/979,948 is still pending and for the above reasons and others, this application is in condition for allowance and it is requested that the rejection be withdrawn. This has been fully considered but is not found persuasive. The claims in the instant application are not currently in condition for allowance, no terminal disclaimer has been filed and the rejection is maintained. With respect to the present provisional obviousness-type double patenting rejection when the present application is otherwise in condition for allowance, Applicants' attention is directed to MPEP 804(I)(B)(1), which states:

> "If a "provisional" nonstatutory obviousness-type double patenting (ODP) rejection is the only rejection remaining in the earlier filed of the two pending applications, while the later-filed application is rejectable on other grounds, the examiner should withdraw that rejection and permit the earlier-filed application to issue as a patent without a terminal disclaimer. If the ODP rejection is the only rejection remaining in the later-filed application, while the earlier-filed application is rejectable on other grounds, a terminal disclaimer must be required in the later-filed application before the rejection can be withdrawn."

20. Claims 1, 6-10, 12-15 and 17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

The response filed 2/1/2007 has introduced NEW MATTER into the claims. As presently amended claim 1 recites wherein the a peptide modified therapeutic antibody is effective for *reducing an immune response against the antibody*, whereas as previously presented, the claim recited that the modified antibody (e.g., see previous claim 2) is effective *for reducing side effects caused by the antibody*. The response did not point out where support for the presently amended claims could be found in the originally filed disclosure. Although the PTO has the initial burden of presenting evidence or reasons why persons skilled in the art would not recognize in the disclosure a description of the invention defined by the claims, when filing an amendment an applicant should show support in the original disclosure for new or amended claims. See MPEP 714.02 and 2163.06 ("Applicant should therefore specifically point out the support for any amendments made to the disclosure."). The disclosure as filed appears to only contemplate side effects resulting from cytokine release, specifically a first-dose cytokine-release syndrome involving TNFalpha, IFNgamma and IL-6 associated with the administration of humanized monoclonal antibody CAMPATH-1H, which recognizes CD52 (e.g., see specification at pp. 1, 3, 11-12 and 17-20). The specification does not provide adequate written support for the broader genus of reducing an immune response against the antibody, encompassing cellular (Th1) and humoral (Th2) immune responses directed against the antibody. The disclosure of "reduced side effects" being limited to cytokine release resulting from the administration of an antibody, does not provide adequate written support for the broader scope of reducing an immune response (i.e., human anti-mouse antibody response or T cell response) that is directed against the antibody, rather than resulting from its administration. Thus, as presently amended, the claims now recite limitations, which were not clearly disclosed in the specification as filed, and now change the scope of the instant disclosure as filed. Such

limitations recited in the presently amended claims, which did not appear in the specification, as filed, introduce new concepts and violate the description requirement of the first paragraph of 35 U.S.C 112. Applicant is required to provide sufficient written support for the limitations recited in the present claims in the specification or claims, as filed, or remove these limitations from the claims in response to this Office Action.

21. No claims are allowed.

22. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David J. Blanchard whose telephone number is (571) 272-0827. The examiner can normally be reached at Monday through Friday from 8:00 AM to 6:00 PM, with alternate Fridays off. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Helms, can be reached at (571) 272-0832.

The official fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David J. Blanchard
Patent Examiner
Art Unit 1643

DB
April 12, 2007